Clean Copy of Amended Claims

10. (Amended) A diagnostic primer comprising (i) a template binding region and (ii) a tail comprising a target binding region and wherein the target binding region hybridises to a complementary sequence in an extension product of the primer corresponding to the target nucleic acid and the complementary sequence is less than 200 base pairs from the template binding region.

11. (Amended) A diagnostic primer comprising (i) a template binding region and (ii) a tail comprising a linker and a target binding region and wherein the target binding region hybridises to a complementary sequence in an extension product of the primer corresponding to the target nucleic acid.

13. (Amended) A primer as claimed in claim 10 or 11 wherein the linker comprises a blocking moiety which prevents polymerase mediated copying of the primer tail.

14. (Amended) A primer as claimed in claim 10 or 11 and further comprising at least one component of an integral signalling system to indicate hybridisation of the target binding region to a complementary sequence in a primer extension product of the primer.

22. (Amended) A primer as claimed in claim 10 or 11 which further comprises a capture region which hybridises to complementary sequence on a solid phase.

24. (Amended) A kit which comprises at least one primer as claimed in claim 10 or 11 together with packaging and instructions for use.

REMARKS

The amendments to the claims are made such that the claim dependencies are in accordance with the requirements of U.S. patent practice. The amendments to the specification are made to comply with the requirements for identifying nucleotide and amino acid sequences by sequence ID number and to insert the attached Sequence Listing into the specification of the application as required by 37 C.F.R. §§1.821 to 1.825. The amendments introduced herein contain no new matter.

This communication includes both a paper copy of the Sequence Listing as required by 37 C.F.R. §1.821(c) and a copy of the Sequence Listing recorded on a diskette in a computer readable form as required by 37 C.F.R. §1.821(e).

In accordance with 37 C.F.R. §1.825(a), I hereby state that the sequences contained in this Sequence Listing are supported in the application as filed. Neither the paper copy nor the computer readable copy contain new matter.

In accordance with 37 C.F.R. §1.821(f), I hereby state that the paper copy in the amended application and the computer readable copy of the Sequence Listing are the same.

RESPECTFULLY SUBMITTED,					
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Attachments: Marked-Up Copies of Amendments

Marked-Up Copy of Substitute Paragraph, Page 18, Fourth Full Paragraph

Examples

Materials

Primers/Scorpions primers:

B2098-BRCA Scorpions: FAM-CGCACGATGTAGCACATCAGAAGCGTGCG-MR-HEG-TTGGAGATTTTGTCACTTCCACTCTCAAA (SEQ ID NO: 1)

Underlined regions are the hairpin forming parts, FAM is the fluorescein dye, MR is a non-fluorogenic fluorophore attached to a uracil, HEG is the replication blocking hexethylene glycol monomer. The probe matches the "C-variant" of the BRCA2 polymorphism and mismatches the "A-variant".

R-186-98: untailed equivalent ofB2098:TTGGAGATTTTGTCACTTCCACTCTCAAA (SEQ ID NO: 2)

R187-98: opposing primer to the R186-98 and the equivalent Scorpions.

Z3702: the probe segment of the Scorpions B2098:

FAM-CGCACGATGTAGCACATCAGAAGCGTGCG-MR (SEQ ID NO: 3)

Marked-Up Copy of Substitute Paragraph, Page 22, Second Full Paragraph

Examples 7 and 8

Random coil embodiment and bimolecular embodiment

Scorpion B2731:

fam-AGGTAGTGCAGAGAGTG-mr-h-GAGCCTCAACATCCTGCTCCCCTCCTACTAC (SEQ ID NO: 4)

Scorpion B4249 (no quencher on same molecule)

fam-AGGTAGTGCAGAGAGTG-h-GAGCCTCAACATCCTGCTCCCCTCCTACTAC (SEQ ID NO: 5)

Quencher oligonucleotide (complement of the tail of B4249):

CACTCTCTGCACTACCT-mr (SEQ ID NO: 6)

ARMS primer R284-97: TTCGGGGCTCCACACGGCGACTCTCAAC (SEQ ID NO: 7)

ARMS primer R283-97: TTCGGGGCTCCACACGGCGACTCTCAAG (SEQ ID NO: 8)